

## INFORMATION ON HAULING WATER

### **Thinking about hauling water to your water system during your next emergency?**



In an emergency, some water systems may need to ration water and haul potable water to provide makeup water to storage tanks. This is a workable emergency plan, provided some advance planning is used.

Keep in mind that the Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, requires the DOH to approve the water hauling trailers used to haul potable water to a public water system. The SDWB will inspect potable water hauling trailers, specify water quality testing requirements and provide a written approval good for one year, to assure that the water hauled remains safe for water system customers. Water haulers are responsible for submitting an application for each water hauling trailer and for the cost and compliance with water quality testing (which at a minimum requires satisfactory testing for total coliform and HPC).

If your emergency plan requires hauling potable water to your public water system, the SDWB urges you to contact your water hauler(s) and inquire whether their trailers are DOH approved. The time to get the trailers certified is now, before a hurricane or some other emergency situation occurs. County water systems are not required to have the DOH approve their trailers, since it is expected that the counties will inspect and test their trailers to their own standards.

Call your SDWB sanitarian or the SDWB at (808)586-4258 for more information.

## **WATER SYSTEM CERTIFICATION FOR CONSUMER CONFIDENCE REPORT (CCR) DUE SOON!!**

The CCR certification form that water systems use to confirm that they have prepared and distributed their CCRs are due on October 1, 2001, three (3) months after July 1, 2001. We recommend that you indicate, in the certification, the date CCRs were distributed to avoid being issued a violation especially if you did not submit a copy of your CCR to DOH by the July 1, 2001 deadline.

For questions concerning the CCR and CCR certification, please contact Nora Macariola-See of the Safe Drinking Water Branch in Honolulu at 586-4258 or call direct from your island on our toll-free numbers, ext. 64258: 974-4000 from Hawai'i, 984-2400 from Maui, 274-3141 from Kaua'i, and 1-800-468-4644 from Moloka'i and Lana'i.

## **CORRECTION OF ERRATA IN AUGUST 2001 ISSUE OF "THE WATER SPOT 2001"**

*In the August 2001 issue of "The Water Spot 2001", an article regarding the New Class V Regulations for Underground Injection Wells appeared. In that article, information related to Post-Closure Alternatives After Closing Large Capacity Cesspools was presented.*

*The following information was presented in error for Hawaii's conditions: ... "2. Holding Tanks: Store the sanitary waste in a holding tank. The tank is then periodically pumped out for proper disposal. ..." According to the Department of Health's Wastewater Branch this alternative is not an acceptable option.*

## ***NEWSRelease: TRACE AMOUNTS OF CHEMICALS FOUND IN OAHU AND KAUAI WATER SYSTEMS***

During routine sampling of drinking water systems across the state, the Department of Health (DOH) found trace amounts of the contaminants 1,2,3-Trichloropropane (TCP), trichloroethylene (TCE), carbon tetrachloride, and atrazine in separate water systems. None of the chemicals discovered were at levels that exceed drinking water standards.

### **Honolulu Board of Water Supply (BWS), Waipahu-Ewa-Waianae and Waipio Heights systems**

Trace levels of TCP were detected in samples collected from the Honolulu BWS Kunia Wells III Pumps 1, 2, and 3 wells. The concentrations of TCP at the Pumps 1, 2, and 3 wells were 0.16 micrograms per liter or parts per billion (ppb), 0.015 ppb, and 0.15 ppb, respectively. These levels are well below the state Maximum Contaminant Level (MCL) of 0.8 ppb. TCP was a contaminant of soil fumigants that were used in pineapple fields in Hawaii. The Environmental Protection Agency does not currently regulate TCP, so there is no federal MCL for this contaminant.

TCP was also confirmed in samples collected from the Honolulu BWS Waipio Heights Pump 2 well. The concentration of TCP was 0.25 ppb, well below the state MCL.

### **Honolulu BWS, Wahiawa system**

Trace levels of TCE were confirmed in samples collected from the Honolulu BWS Wahiawa Wells I Pump 1 well. TCE was detected at between 0.2 and 0.5 ppb. The federal and state MCL for TCE is 5 ppb. TCE is a common metal and dry cleaning fluid.

### **Waiawa Correctional Facility**

The presence of carbon tetrachloride was confirmed in samples collected from the Waiawa Correctional Facility water system. Carbon tetrachloride was detected at between 0.2 and 0.5 ppb, well below the federal and state MCL of 5 ppb. Carbon tetrachloride was once a popular household cleaning fluid. The Safe Drinking Water Branch is conducting additional monitoring to determine the cause of the contamination.

### **Kauai Department of Water, Lihue system**

The herbicide atrazine was confirmed in samples collected from the Kilohana Well C serving the Lihue water system. The concentration of atrazine found was 0.063 ppb, well below the state and federal MCL of 3 ppb.

While none of these findings represent a health threat, the DOH will continue to carefully monitor these sources to ensure that public health is not compromised.

**Release Date: August 31, 2001**

**Press Release #: DOH #01-53**

## ***SCENES FROM THE AUGUST 30<sup>th</sup> BACTI SAMPLING TRAINING WORKSHOP***



*David Kawahara (far right) of the Safe Drinking Water Branch assisting participants in performing BACTI sample collection.*



*Participants performing chlorine testing of unknown samples using chlorine test kits (color wheels and colorimeters).*



**AWWA SATELLITE TELECONFERENCE  
DISTRIBUTION SYSTEM REPAIR, REHABILITATION, AND REPLACEMENT:  
WHAT EVERY OPERATOR SHOULD KNOW**

**Thursday, November 1, 2001**

**7:00 a.m. - 10:30 a.m.**

Increased attention has been focused on how utilities will deal with aging water and wastewater infrastructure across the country, and how much it will cost to make the necessary improvements that utilities face. In this all-new program, experts in the field will assist utility operators and managers in determining when and how to repair, rehabilitate, or replace their distribution system. You'll find out how to make the best decisions and what new technologies are available to assist you.

**A sample of what you'll get from the teleconference:**

- P** History and status of distribution systems in North America
- P** Making the right choices for your utility: pipe material selection, pipe sizing, construction and placement, valve and fitting installation, and disinfection procedures
- P** The "how-to's" of repair and rehabilitation: notifying customers, proper construction and safety practices, methods of repair, preventing contamination, and restoring service
- P** Replacing distribution systems: trenchless technologies, pipe bursting and other techniques, cost analysis of rehabilitation versus replacement
- P** How to evaluate and choose the right option for your utility
- P** Distribution system maintenance: keeping good records, cathodic protection, valves, hydrants and unidirectional flushing, and leak detection

Whether you're a small or large utility, groundwater or surface water, this program will give you practical solutions and guidelines to dealing with an aging distribution system. Take advantage of this opportunity and register now to participate!

**LEARN FROM A PANEL OF LEADING EXPERTS**

**Tim Ball, Consultant, Haworth, Meyer & Boleyn, Inc.**, has 24 years of experience in the potable water industry. Tim worked for 23 years at the Louisville Water Company where during his last six years he managed Louisville's annual \$4 million, 28-mile water main rehabilitation program which successfully reduced the cost of water main rehabilitation by more than 25%, saving Louisville in excess of \$10 million over the life of the program. Tim currently works for HMB, Inc., a consulting engineering firm based in Frankfort, Kentucky, and now markets his rehabilitation strategies to a number of cities throughout the eastern United States.

**Wilbert Ridgley, Jr., Section Head, Washington Suburban Sanitation Commission**, has worked for 22 years for the Washington Suburban Sanitary Commission (WSSC). For approximately 10 of those years, he directed the agency's Systems Rehabilitation Section and was responsible for implementing the commission's \$18.5 million annual reconstruction program which utilized various reconstruction processes including water main cleaning and lining, sewer main lining, sewer main and connection grouting, pipebursting, manhole reconstruction, house connection renewals, and various other rehabilitation processes. Within the scope of these program initiatives, his responsibilities included overall program administration, along with development, review, and evaluation of new reconstruction methods, technologies, and procedures. He is also tasked with coordinating the Systems Rehabilitation Section's community outreach program, serving as Commission Representative during community, civic and municipal meetings and directs a new unit within WSSC created to serve as a customer advocacy group, serving the interest of WSSC customers.

**Kenneth Morgan, P.E., Consultant, KCM Consulting**, is a design engineer with extensive distribution infrastructure experience. He currently serves as President and Chief Engineer of KCM Consulting Services, Inc. He previously served as a design engineer for Denver Water, where he was responsible for the department's pipe rehabilitation program, as well as inspection of clear water reservoirs. He has also been responsible for the daily operation of construction crews, fire hydrant maintenance teams, valve maintenance, and operation personnel. He is the course developer and instructor for AWWA's seminar, *"Replacing and Maintaining Water Distribution Systems: Strategies for Managers."*

**Kanwal Oberoi**, Water Distribution Department Head, *Charleston Commission of Public Works*, has more than 20 years of experience in operation and maintenance of water treatment plants and water distribution systems. He currently holds the position of Superintendent and Engineer of the Water Distribution Department with the Commission of Public Works in Charleston, South Carolina. He is credited towards developing unidirectional flushing techniques and has led his utility to become the first water utility in the nation to become "ISO 14001 certified."

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**AWWA SATELLITE TELECONFERENCE REGISTRATION FORM**  
**DISTRIBUTION SYSTEM REPAIR, REHABILITATION, AND REPLACEMENT:**  
**WHAT EVERY OPERATOR SHOULD KNOW**  
Thursday, November 1, 2001

**Choose a location (one only)**

☐ **Oahu**

Dept. of Health Laboratory  
2725 Waimano Home Rd.  
Pearl City

☐ **Maui**

Eddie Tam Memorial Gym  
Makawao Avenue  
Makawao

☐ **Hawaii**

Dept. of Health Hilo  
1582 Kamehameha Ave.  
Hilo

☐ **Kauai**

Civil Defense Office  
County of Kauai  
4396 Rice Street  
Lihue

**Please be at the site by 6:45 a.m. The teleconference will begin promptly at 7:00 a.m.**

Attending Teleconference

Name(s) \_\_\_\_\_

Organization/Agency \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Registration Fee (includes refreshments) due **October 15, 2001**

☐ AWWA member    **\$40.00**    AWWA member # \_\_\_\_\_

☐ Non-member    **\$50.00**    **MAKE CHECKS PAYABLE TO HAWAII SECTION AWWA**

Mail registration form and payment to:

Jacky Takakura  
Maui Department of Water Supply  
P. O. Box 1109  
Wailuku, HI 96793-6109

*Government employees may fax registration  
and subsequently remit payment upon  
receipt of their purchase order.*

*Fax: (808) 270-7951*

*Phone: (808) 270-8046*

☐ Check here if you are a certified water treatment plant or distribution system operator and would like CEUs.



## Public Water Systems Operator & Manager Training Program

*Statewide, one-day workshops for professional development and CEUs*

**Sponsored by:** *Hawaii Department of Health, Safe Drinking Water Branch, and the U.S. Environmental Protection Agency*

**Presented by:** *Rural Community Assistance Corporation*

*Public drinking water system supervisory, managerial, operations and maintenance personnel are invited to attend and participate in one-day, professional development workshops scheduled for locations around the state.*

*Three different workshops are being offered from September through December 2001 for Continuing Education Credit (CEUs) for any water system personnel interested in learning more about the topics and subject materials covered. Each workshop will provide 5.0 training contact hours (0.6 CEUs). Note: Beginning in January 2002, these workshop topics will be changed.*

*One workshop will be aimed at supervisory and managerial staff and other interested personnel, and will focus on SAFETY IN THE WORKPLACE. The emphasis will be placed upon awareness of workplace safety policy, requirements and regulations, including HIOSH and OSHA need-to-know criteria.*

*One workshop will be aimed at water treatment operators and others interested in learning about water treatment. The focus will be on TREATMENT TECHNOLOGIES FOR CONTAMINANT REMOVAL. The emphasis will be on best available treatment technologies for removal of various contaminants from drinking water.*

*One workshop will be aimed at distribution system operators and other interested personnel, and will focus on CROSS-CONNECTION CONTROL & BACKFLOW PREVENTION. The emphasis will be on protection of public health, approved backflow prevention devices, industry standards and local codes for installation, inspection, testing and maintenance of devices.*

### **WHERE/WHEN:**

#### **SAFETY IN THE WORKPLACE WORKSHOP**

*Pearl City, DOH Laboratory Facility - Oct. 9, 2001 \**  
*Kaunakakai, Kulana 'Oiwai - Oct. 11, 2001 \**  
*Wailuku, State Office Building - Nov. 8, 2001*  
*Lihue, Kauai - Nov. 2001 (TBA)*  
*Kona, Hawaii - Dec. 2001 (TBA)*

#### **TREATMENT TECH./ CONTAMINANT REMOVAL**

*Pearl City, DOH Laboratory Facility - Oct. 16, 2001 \**  
*Lihue, Kauai Dept. of Water Board Rm.- Oct. 25, 2001 \**  
*Hilo, Environmental Health Facility - Oct. 30, 2001 \**  
*Kaunakakai, Kulana 'Oiwai - Nov. 5, 2001*  
*Wailuku, State Office Building - Nov. 20, 2001*  
*Kona, Hawaii - Dec. 2001 (TBA)*  
*Lihue, Kauai - Dec. 2001 (TBA)*

#### **CROSS-CONNECTION CONTROL & BACKFLOW PREV.**

*Pearl City, DOH Laboratory Facility - Oct. 23, 2001 \**  
*Keahole-Kona, NELHA Conference Rm.- Oct. 24, 2001 \**  
*Wailuku, State Office Building - Oct. 31, 2001 \**  
*Keahole-Kona, NELHA Conference Rm. - Nov. 6, 2001*  
*Hilo, Environmental Health Facility - Nov. 13, 2001*  
*Pearl City, DOH Laboratory Facility - Nov. 15, 2001*  
*Lihue, Kauai - Nov. 2001 (TBA)*  
*Wailuku, Maui - Dec. 2001 (TBA)*  
*Kaunakakai, Molokai - Dec. 2001 (TBA)*  
*Pearl City, Oahu - Dec. 2001 (TBA)*  
*Lanai City - Feb. 2002 (TBA)*

*\* Time: 9:30 a.m. to 3:30 p.m. - all workshops/locations.*

*Note: December workshop dates and locations to be announced (TBA).*



## ***“WHAT IS A SANITARY SURVEY? A LOOK AT THE ELEMENTS OF A SURVEY”***

**WHAT IS A SANITARY SURVEY:** “...an on-site review of the water source, facilities, equipment, operations, and maintenance of a public water system (PWS) for the purpose of evaluating the adequacy of such source, facilities, equipment, operations, and maintenance for producing and distributing safe drinking water.” This definition has been broadened to include the assessment of management practices.

Sanitary surveys will identify **sanitary risks** that might interrupt the “multiple barrier” approach to drinking water protection. The multiple barrier protection system is intended to provide several barriers of protection and may include: watershed/wellhead protection/source water protection, treatment, disinfection, distribution system. The sanitary survey would determine if any of these barriers had failed. A sanitary survey will generally include eight (8) elements: (1) Drinking Water Source, (2) Drinking Water Treatment, (3) Distribution System, (4) Finished Water Storage, (5) Pumps/Pump Facilities and Controls, (6) Monitoring/ Reporting/Data Verification, (7) Water System/ Management/Operations, and (8) Operator Compliance with State Requirements.

**In this issue of “The Water Spot 2001”, we begin our series on the elements of a sanitary survey by looking at the drinking water regulations that require sanitary surveys or are affected by sanitary surveys.**

## ***SANITARY SURVEY -- APPLICABLE REGULATIONS***

### **Total Coliform Rule (TCR)**

The Total Coliform Rule (TCR) requires that sanitary surveys be conducted at least once every five years for systems that take fewer than five samples per month. EPA has encouraged the state to perform more frequent sanitary surveys, annually for surface water systems and triennially for groundwater systems.

### **Interim Enhanced Surface Water Treatment Rule (IESWTR)**

The Interim Enhanced Surface Water Treatment Rule (IESWTR), which was promulgated in December 1998, has special primacy requirements for the State to have authority to assure that PWSs respond in writing to significant deficiencies outlined in sanitary survey reports no later than 45 days after receipt of the reports, indicating how and on what schedule the system will address significant deficiencies noted in the survey (§ 142.16(b)(1)(ii)) and that PWSs take the necessary steps to address significant deficiencies identified in the sanitary survey reports (§ 142.16(b)(1)(iii)). The Department needs to ensure that the State has the appropriate statutory and regulatory authority and procedures to ensure that systems are required to respond to and correct significant deficiencies identified in sanitary surveys.

### **Groundwater Rule**

The Groundwater Rule is also expected to have special primacy requirements, similar to those for the Interim Enhanced Surface Water Treatment Rule (as described above), that will apply to groundwater systems.

### **Source Water Assessment Program**

Sanitary surveys provide a fundamental understanding of current and potential threats to water quality and system reliability. Sanitary surveys could provide the opportunity for state drinking water officials to conduct the formal source water delineations and assessments or sanitary surveys could provide a means for providing updates to the Source Water Assessment Program (SWAP) and follow-up on development of Source Water Protection activities.

Conversely, information collected in source water assessments, whether done separately or concurrently, may enhance sanitary survey information and identify systems of concern that may receive priority for surveys.

**In future issues of “The Water Spot 2001,” we will look at drinking water sources, water treatment and the water distribution system.**



*The Water Spot 2001 is published by the Safe Drinking Water Branch, Environmental Management Division of the Hawai'i State Department of Health and is distributed to water purveyors, water system operators, staff, consultants, and other interested parties.*

*The Water Spot 2001 may also be viewed on the Safe Drinking Water Branch's web site at:  
<http://www.hawaii.gov/health/eh/sdwb>*

*Please send your  
suggestions, ideas,  
questions or  
comments to:*

***THE WATER SPOT 2001**  
Safe Drinking Water Branch  
State Department of Health  
919 Ala Moana Blvd., Room 308  
Honolulu, Hawaii 96814*

*OR*

*Fax us at (808) 586-4370, Attn: "THE WATER SPOT 2001"*

*SDWB WEB SITE:*

*<http://www.hawaii.gov/health/eh/sdwb>*

*HISWAP WEB SITE:*

*Currently Under Construction*



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